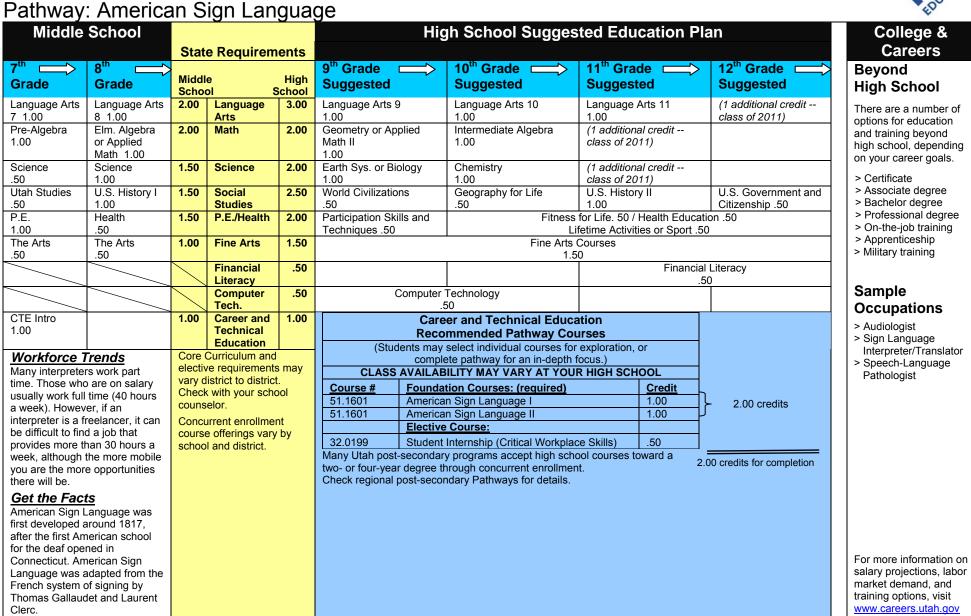
Area of Study: Health Science & Technology Education

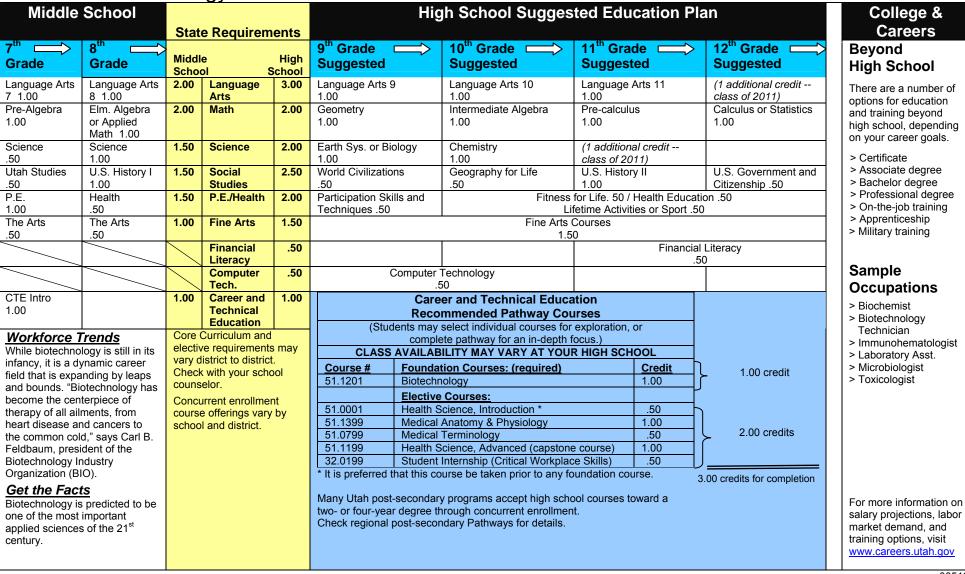


005101 Revised Jan 08

Area of Study: Health Science & Technology Education

Pathway: Biotech Research & Development

Biotechnology



005102

# High School to College and Career Pathway: Secondary Area of Study: Health Science & Technology Education

Pathway: Therapeutic Services Pharmacv

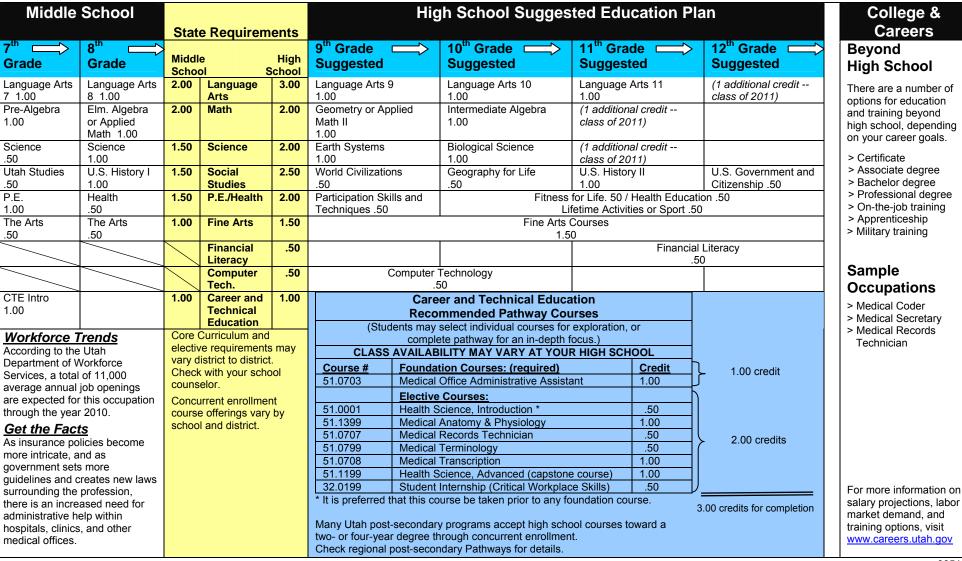


	1 Halling	<del>loy</del>									
Middle School State Require			e Requirem	ents	Hiç	College & Careers					
7 <sup>th</sup> Crade	8 <sup>th</sup> Grade	Middl Scho	le	High School	9 <sup>th</sup> Grade $\Longrightarrow$ Suggested	10 <sup>th</sup> Grade $\Longrightarrow$ Suggested	11 <sup>th</sup> Grade ——> Suggested	→ 12 <sup>th</sup> Grade   Suggested	Beyond High School		
Language Arts 7 1.00	Language Arts 8 1.00	2.00	Language Arts	3.00	Language Arts 9 1.00	Language Arts 10	Language Arts 11	(1 additional credit class of 2011)	There are a number of		
Pre-Algebra 1.00	Elm. Algebra or Applied Math 1.00	2.00	Math	2.00	Geometry 1.00	Intermediate Algebra 1.00	Pre-calculus 1.00	Calculus or Statistics 1.00	options for education and training beyond high school, depending on your career goals.		
Science .50	Science 1.00	1.50	Science	2.00	Earth Sys. or Biology 1.00	Chemistry 1.00	Physics 1.00		> Certificate > Associate degree		
Utah Studies .50	U.S. History I 1.00	1.50	Social Studies	2.50	World Civilizations .50	Geography for Life	U.S. History II 1.00	U.S. Government and Citizenship .50	> Bachelor degree > Professional degree		
P.E. 1.00	Health .50	1.50	P.E./Health	2.00	Participation Skills and Techniques .50	l L	ation .50 50	<ul><li>On-the-job training</li><li>Apprenticeship</li><li>Military training</li></ul>			
The Arts .50	The Arts .50	1.00	Fine Arts	1.50		Fine Arts Courses 1.50					
			Financial Literacy	.50			Financ	ial Literacy .50	Sample		
			Computer Tech.	.50		Technology 50			Occupations > Pharmacy Aide		
CTE Intro 1.00		1.00	Career and Technical Education	1.00	Reco	Career and Technical Education Recommended Pathway Courses (Students may select individual courses for exploration, or					
Workforce 7			Curriculum and ve requirement		complete pathway for an in-depth focus.)  CLASS AVAILABILITY MAY VARY AT YOUR HIGH SCHOOL						
With increased me aging population a given to pharmacy opportunities will be especially for thos	With increased medical needs of an aging population and additional tasks given to pharmacy techs., many job opportunities will be created, especially for those with formal training and certification.		district to district k with your school selor. urrent enrollme e offerings vary	ool nt	Course #         Founda           51.0805         Pharma           Elective         51.0001           Health S	dation Courses: (required) macy Technician ive Courses: h Science, Introduction * .50 cal Anatomy & Physiology 1.00		2.00 credits			
Pharmacist:  New opportunities are emerging for pharmacists in managed care organizations, where they analyze trends and patterns in medication use, and in pharmacoeconomics—		schoo	ol and district.		51.1799 Medical Terminology .50  51.1799 Medical Terminology .50  51.1199 Health Science, Advanced (capstone course) 1.00  32.0199 Student Internship (Critical Workplace Skills) .50  * It is preferred that this course be taken prior to any foundation course.			1.00 credit  3.00 credits for completion			
the cost and benefit analysis of different drug therapies.  Get the Facts  Pharmaceutical makers are accustomed to a research-to-market are long at 10 years in order.					two- or four-year degree th	y programs accept high sch nrough concurrent enrollme ndary Pathways for details.			For more information on salary projections, labor market demand, and training options, visit www.careers.utah.gov		
cycle of as long as 10 years in order to discover, develop and commercially launch a new drug.		In Utal	h, a pharmacist med.	nust be					005110 Revised Jan 0		

Area of Study: Health Science & Technology Education

# Pathway: Health Informatics

Medical Office Administrative Assistant



005107

Revised Jan 08

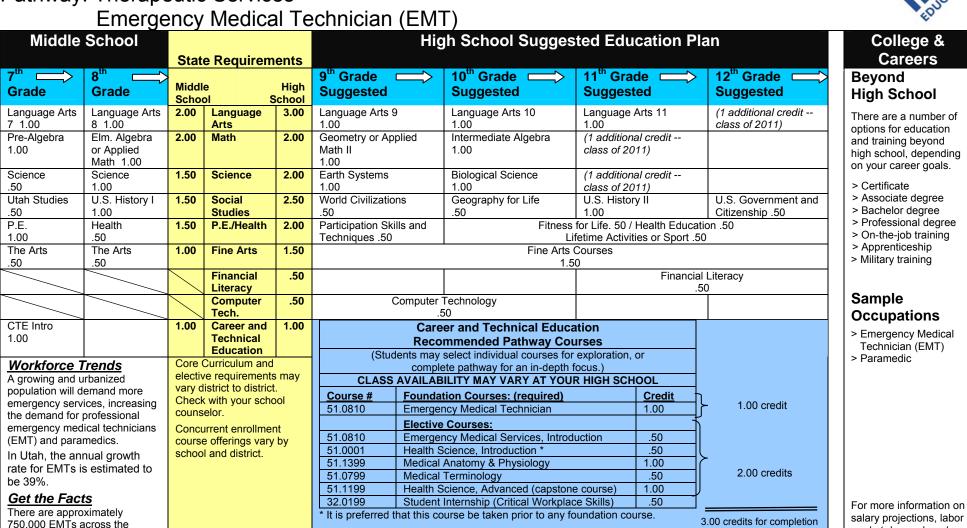
## Pathway: Therapeutic Services Dental



	Dentai										•
Middle	Stat	e Requi	rements	High School Suggested Education Plan						College & Careers	
7 <sup>th</sup> Crade	8 <sup>th</sup> C	Middle High School School		Juggesteu		10 <sup>th</sup> Grade Suggested	11 <sup>th</sup> Grade Suggested		> 12 <sup>th</sup> Grade Suggested	Beyond High School	
Language Arts 7 1.00	Language Arts 8 1.00	2.00	Langua Arts	ge 3.00	Language Arts	s 9	Language Arts 10 1.00	Language A	Arts 11	(1 additional credit class of 2011)	There are a number of options for education
Pre-Algebra 1.00	Elm. Algebra or Applied Math 1.00	2.00	Math	2.00	Math II 1.00		Intermediate Algebra 1.00	Pre-calculu 1.00	S	Statistics or Calculus 1.00	and training beyond high school, depending on your career goals.
Science .50	Science 1.00	1.50	Science	2.00	Earth Sys. or I	Biology	Chemistry 1.00	Physics 1.00			> Certificate
Utah Studies .50	U.S. History I 1.00	1.50	Social Studies	2.50	.50		Geography for Life .50	U.S. History 1.00		U.S. Government and Citizenship .50	> Associate degree > Bachelor degree
P.E. 1.00	Health .50	1.50	P.E./Hea		Participation S Techniques .5		L	Fitness for Life. 50 / Health Education .50 Lifetime Activities or Sport .50			> Professional degree > On-the-job training > Apprenticeship
The Arts .50	The Arts .50	1.00	Fine Art	ts 1.50		Fine Arts Courses 1.50					
			Financia Literacy	1					Financ	ial Literacy .50	
			Comput Tech.	ter .50		Computer Technology .50				Sample Occupations	
CTE Intro 1.00		1.00	Career a Technic Educati	al	(5)	Career and Technical Education Recommended Pathway Courses (Students may select individual courses for exploration, or					> Dental Assistant > Dental Ceramist
Workforce 7		Core Curriculum and elective requirements may			complete pathway for an in-depth focus.)						> Dental Hygienist > Dental Laboratory
The dental indu	assistants.	vary c	listrict to d	istrict.	CLAS Course #	CLASS AVAILABILITY MAY VARY AT YOUR HIGH SCHOOL  Course # Foundation Courses: (required) Credit			2.00 credits	Technician > Dentist	
Dentists are hiri assistants to pe	rform routine	Check with your school counselor.		51.0601			2.00	2.00 Credits	> Orthodontic Technician		
	tasks so that they may devote more time to complex		Concurrent enrollment course offerings vary by				.50				
procedures. Em		school and district.		51.1399 Medical Anatomy & Physiology 51.0799 Medical Terminology			1.00 .50	1.00 credit			
	increase 27% through the year				51.1316 Health Science, Advanced (capstone course) 1.00 32.0199 Student Internship (Critical Workplace Skills) .50			1.00	-		
Get the Facts					* It is preferred that this course be taken prior to any foundation course.  3.00 credits for completion						
Research shows that chronic gum disease leads to the					Many Utah post-secondary programs accept high school courses toward a						For more information on
release of inflammatory substances and bacteria into the					two- or four-year degree through concurrent enrollment. Check regional post-secondary Pathways for details.						salary projections, labor market demand, and
blood stream, which leads to heart disease.			dentist mi	l hygienist ust be							training options, visit www.careers.utah.gov
		1100113	cu.								00510

Area of Study: Health Science & Technology Education

Pathway: Therapeutic Services



Many Utah post-secondary programs accept high school courses toward a

two- or four-year degree through concurrent enrollment.

Check regional post-secondary Pathways for details.

Note: For more information talk to your school counselor.

nation. EMT-Basics comprise

Intermediates 7%: and EMT-

71% of this total; EMT-

Paramedics 22%.

market demand, and

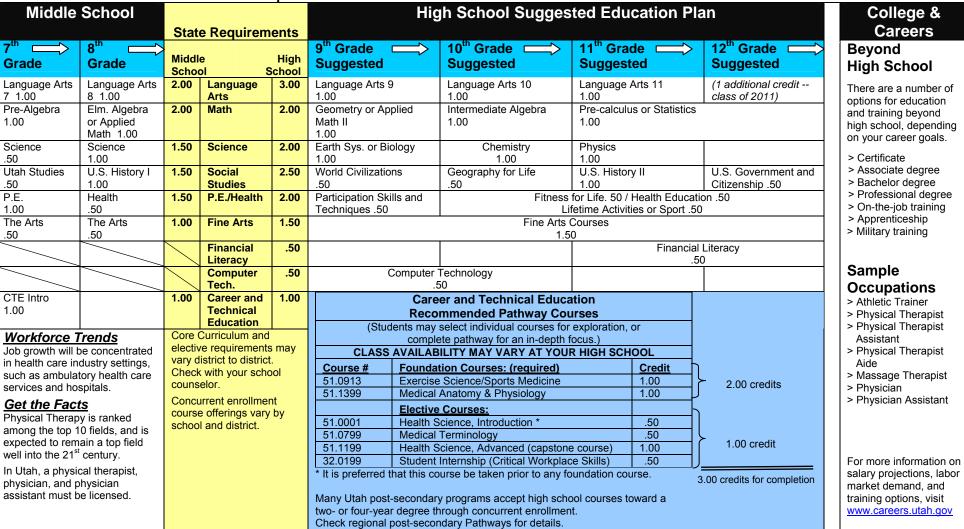
training options, visit

www.careers.utah.gov

Area of Study: Health Science & Technology Education

# Pathway: Therapeutic Services

**Exercise Science/Sports Medicine** 

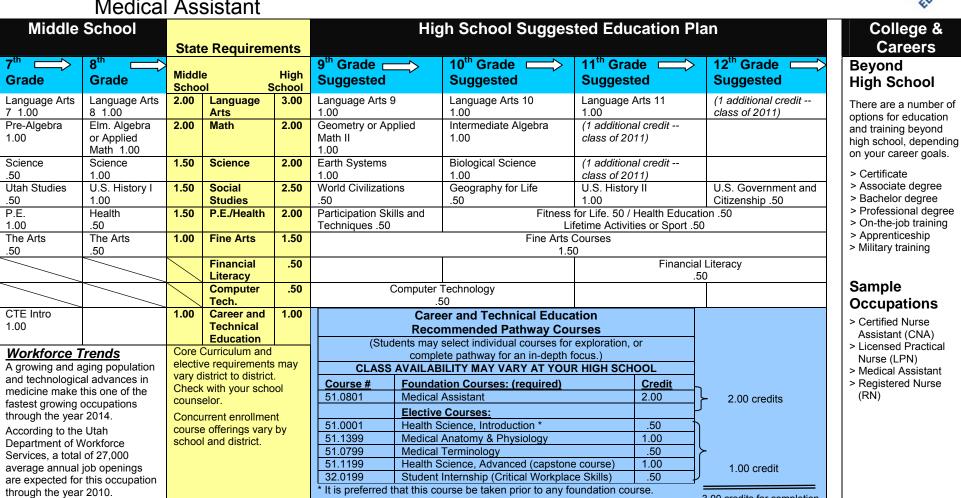


005105



Area of Study: Health Science & Technology Education

# Pathway: Therapeutic Services Medical Assistant



Many Utah post-secondary programs accept high school courses toward a

two- or four-year degree through concurrent enrollment.

Check regional post-secondary Pathways for details.

005106 Revised Jan 08

For more information on

salary projections. labor

market demand, and

training options, visit www.careers.utah.gov

3.00 credits for completion

**Note:** For more information talk to your school counselor.

Get the Facts

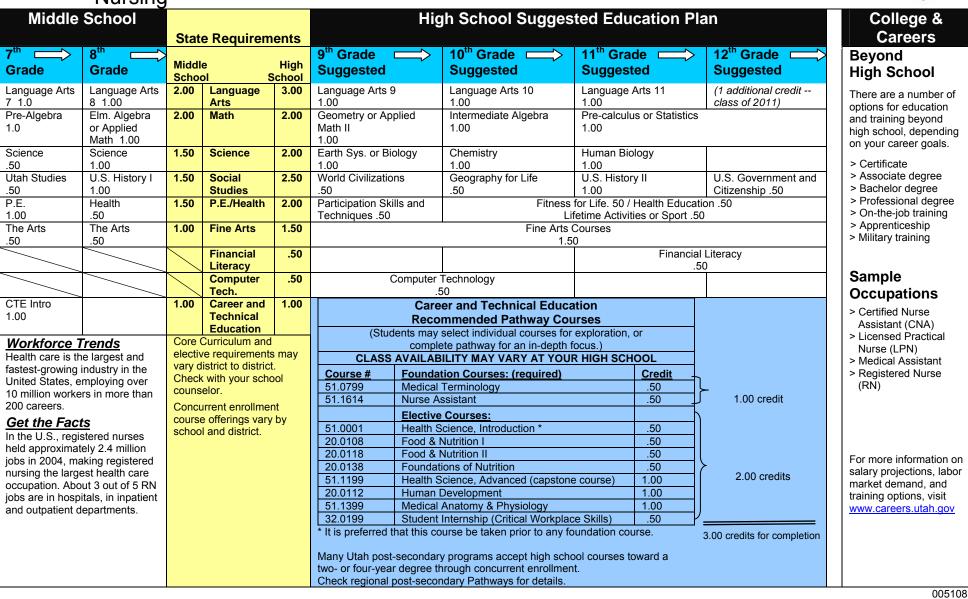
387,000 jobs in 2004.

Medical assistants held about

Area of Study: Health Science & Technology Education

# Pathway: Therapeutic Services

Nursina



# High School to College and Career Pathway: Secondary Area of Study: Health Science & Technology Education

# Pathway: Therapeutic Services Optical Technician



	Optical	100	illilolali						
Middle School		State Requirements			Hiç	College & Careers			
7 <sup>th</sup> C	8 <sup>th</sup> Grade	Middle High School School		9 <sup>th</sup> Grade	10 <sup>th</sup> Grade Suggested	11 <sup>th</sup> Grade ——> Suggested	12 <sup>th</sup> Grade Suggested	Beyond High School	
Language Arts 7 1.00	Language Arts 8 1.00	2.00	Language Arts	3.00	Language Arts 9 1.00	Language Arts 10 1.00	Language Arts 11 1.00	(1 additional credit class of 2011)	There are a number of options for education
Pre-Algebra 1.00	Elm. Algebra or Applied Math 1.00	2.00	Math	2.00	Geometry or Applied Math II 1.00	Intermediate Algebra 1.00	(1 additional credit class of 2011)		and training beyond high school, depending on your career goals.
Science .50	Science 1.00	1.50	Science	2.00	Earth Systems 1.00	Biological Science 1.00	(1 additional credit class of 2011)		> Certificate
Utah Studies .50	U.S. History I 1.00	1.50	Social Studies	2.50	World Civilizations .50	Geography for Life .50	U.S. History II 1.00	U.S. Government and Citizenship .50	> Associate degree > Bachelor degree
P.E. 1.00	Health .50	1.50	P.E./Health	2.00	Participation Skills and Fitness for Life. 50 / Health Education .50 Techniques .50 Lifetime Activities or Sport .50		<ul><li>Professional degree</li><li>On-the-job training</li><li>Apprenticeship</li></ul>		
The Arts .50	The Arts .50	1.00	Fine Arts	1.50			Courses 50	> Military training	
			Financial Literacy	.50				al Literacy 50	0
			Computer Tech.	.50	•	Technology 50			Sample Occupations
Job openings for optical technicians are expected to be limited because the occupation is small.  Get the Facts The American Optometric			Career and Technical Education Curriculum and re requirement listrict to district with your schelor. Current enrollme e offerings vary I and district.	s may t. ool nt	Career and Technical Education Recommended Pathway Courses  (Students may select individual courses for exploration, or complete pathway for an in-depth focus.)  CLASS AVAILABILITY MAY VARY AT YOUR HIGH SCHOOL  Course # Foundation Courses: (required)  51.1802 Optical Technician 1.00  Elective Courses:  51.0001 Health Science, Introduction * .50  51.1399 Medical Anatomy & Physiology 1.00  51.1799 Health Science, Advanced (capstone course) 1.00  32.0199 Student Internship (Critical Workplace Skills) .50  * It is preferred that this course be taken prior to any foundation course.  Many Utah post-secondary programs accept high school courses toward a two- or four-year degree through concurrent enrollment.		}	> Optician Lab. Tech. > Ophthalmic Lab. Technician > Lathe Operator > Lens Mounter II > Lens Polisher > Optical Instrument Assembler > Optical Technician  For more information on salary projections, labor market demand, and training options, visit	
In Utah, an optometrist and ophthalmologist must be licensed.					S. Color Togranial poor 30001	ndary Pathways for details.			www.careers.utah.gov

# Pathway: Therapeutic Services Surgical Technician



Middle School		State Requirements			Hiç	College & Careers			
<b>7</b> <sup>th</sup> =	8 <sup>th</sup>				9 <sup>th</sup> Grade $\Longrightarrow$	10 <sup>th</sup> Grade	11 <sup>th</sup> Grade	12 <sup>th</sup> Grade	Beyond
Grade	Grade	Middle High School School		Suggested	Suggested	Suggested	Suggested	High School	
Language Arts 7 1.00	Language Arts 8 1.00	2.00	Language Arts	3.00	Language Arts 9 1.00	Language Arts 10 1.00	Language Arts 11 1.00	(1 additional credit class of 2011)	There are a number of options for education
Pre-Algebra 1.00	Elm. Algebra or Applied Math 1.00	2.00	Math	2.00	Geometry or Applied Math II 1.00	Intermediate Algebra 1.00	Pre-calculus 1.00		and training beyond high school, depending on your career goals.
Science .50	Science 1.00	1.50	Science	2.00	Earth Sys. or Biology 1.00	Chemistry 1.00	(1 additional credit class of 2011)		> Certificate
Utah Studies .50	U.S. History I 1.00	1.50	Social Studies	2.50	World Civilizations	Geography for Life	U.S. History II	U.S. Government and Citizenship .50	> Associate degree > Bachelor degree
P.E. 1.00	Health .50	1.50	P.E./Health	2.00	Participation Skills and Techniques .50		for Life. 50 / Health Education if the following for Life. 50 / Health Education if the following for Life. 50 / Health Education is for Life. 50 / Health E	ation .50	> Professional degree > On-the-job training
The Arts .5	The Arts .50	1.00	Fine Arts	1.50	·	Fine Arts 1.	50		> Apprenticeship > Military training
			Financial Literacy	.50			Financi	al Literacy .50	
			Computer Tech.	.50		Technology 50			Sample Occupation
CTE Intro 1.00		1.00	Career and Technical Education	1.00	Care Reco	er and Technical Educ mmended Pathway Co	urses		> Surgical Technician
Workforce Demand for sur	Trends gical technicians	Core Curriculum and elective requirements may			comple	select individual courses fo ete pathway for an in-depth BILITY MAY VARY AT YOU			
will rise as the pand as new tech	hnologies allow	vary district to district. Check with your school counselor.			Course #Foundation Courses: (required)Credit51.0909Surgical Technician2.00			2.00 credits	
	main the primary	Concurrent enrollment course offerings vary by				Courses: Science, Introduction *			
and clinics, incli	employer, but physician offices and clinics, including ambulatory surgical centers, will provide		l and district.	Dy	51.1399 Medical 51.0799 Medical	Anatomy & Physiology Terminology Science, Advanced (capston	.50 1.00 .50 ne course) 1.00	1.00 credit	
Get the Fac	Get the Facts				32.0199 Student * It is preferred that this co				
commonly refer	Surgical technicians are commonly refered to as "scrubs." More than three-				Many Utah post-secondar				
fourths of scrub hospital setting,	fourths of scrubs work in a hospital setting, with the				two- or four-year degree the Check regional post-secon	For more information on salary projections, labor market demand, and			
are employed d surgeons for sp	exception of private scrubs who are employed directly by surgeons for special teams – like transplant work.								training options, visit www.careers.utah.gov

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